

**Nonpoint Source Tracking and Monitoring Council**  
**October 25, 2005**  
**Meeting Minutes**

NPS Management Measure Tracking- Steve Fagundes, SWRCB

Management Measure (MM) Tracking in the California Nonpoint Source Program is used as method to show the effectiveness of improving water quality monitoring and maintaining beneficial uses through, for example, regulatory actions, outreach and etc. In the short term, management measure implementation can be used as a surrogate to determine program effectiveness in terms of the increase in MM implementation and where they exist. In the long term MM implementation can be measure in as water quality improvements. Several tools or indicators have been identified to be used to track implementation of management measures. Such tools or indicators consist of policies and existing programs, surveys, and field data. In terms of next steps, the NPS Program plans to: apply the tracking tools for each land use category (agriculture, silviculture, urban, marine and recreational boating, hydromodification and wetlands) via IACC subcommittees and TMC; establish baseline conditions by determining and assessing the available implementation information; and developing and implementing MM/Management Practice tracking strategy.

Marina Management Measure Tracking – Lisa Sniderman, CCC

The goal of the California NPS Plan is to implement 61 MMs by the year 2013. The California NPS Plan includes 16 MMs for reducing nonpoint source pollution (NPS) from marinas and recreational boating activities. marina and recreational boating The NPS Program is initially prioritizing tracking marina MMs related to: 4.1A. Water Quality Assessment, 4.1G. Sewage Facilities, 4.1H. Waste Management and 4.3H. Public Education and Outreach. These MMs reflect “areas” that have also been the focus of the Marina Interagency Coordinating Committee (IACC) working group over the past years. To track the extent of MM implementation, the NPS Program has proposed the following four indicators:

- (1) Number and location of 303(d)-listed waterbodies that include marinas as a source; number and locations of marinas that have been “assessed” for water quality baseline data, have monitoring programs;
- (2) Number, location of marinas, sewage pumpout facilities; mobile services in the state and geographic areas supplied, number of boaters serviced at marinas;
- (3) Number, location of used oil collection facilities/waste management facilities related to marinas, number, location of absorbent pad distribution, absorbent pad collection centers; and
- (4) Number and locations of regional clean marina/clean boating programs in the state; number of marinas participating in programs

A series of maps were developed from surveys and other sources to present data related to these indicators and to help illustrate the status of implementation of these NPS MMs

at marinas in California. Initial results include: (Note: some data differ from data presented at TMC due to additional analyses conducted-please do not cite draft data)

- 5 water bodies specifically identify marinas and recreational boating as sources of impairment (Region 6 and 9)
- Majority of marinas in California are located in water bodies impaired by pollutants that could be related to marinas and recreational boating (28 bays and harbors, 18 estuaries, 59 lakes, 4,347 stream reaches, 33 shorelines, and 3 wetlands)
- There are limitations with this indicator; e.g., pollutants could come from non marina-related sources
- At least 57/516 marinas (over 10 slips) or 11% in California have been assessed or have monitoring programs (SF Bay = 34, Tahoe = 14)
- May be many additional assessments; also data limitations with this indicator, e.g., only publicly available data used, incomplete data set, assessments aren't comparable, etc.

#### 4.1G Sewage Facilities

- 282/516 (55%) of marinas have pumpouts or have ability to contract a mobile service
- 234/516 (45%) of marinas do not have sewage pumpouts or ability to contract a mobile service

#### 4.1H Waste Management Facilities/

- 295/516 (57%) of marinas do not distribute or collect absorbent pads (includes 10 marinas with no data).
- 153/516 (30%) distribute and collect absorbent pads (doesn't incl. data for marinas that only distribute or only collect)
- 401/516 (78%) of marinas collect used oil
- 115/516 (22%) do not collect used oil

#### 4.3H Public Education and Outreach/

- 5 types of programs in California: marina-specific, local, water body specific, regional, and statewide
- Marina-specific programs: 6 in California outreach to 2,365 boaters
- Total (not including statewide) 30 programs, 328 marinas, 75,018 boaters (statewide: 4 programs, 516 marinas, 106,746 boaters)

#### Challenges:

- Do the indicators used in this tracking effort make sense?
- Are there indicators, data sources that are missing from the tracking effort or do you have thoughts on overcoming limitations of indicators?
- Are there other suggestions on tracking implementation of MM in marinas?

#### Suggestions/Comments:

- Can data be normalized by the number of slips? Look at the number slips for NPS and anything that fall under marinas
- Has Marina Del Ray been looked at as a data source?

For more information refer to the power point presentation at <http://www.waterboards.ca.gov/nps/tmc.html>.

**Action Item:** To provide additional comments and suggestion on this work, please contact Lisa Sniderman at [lsniderman@coastal.ca.gov](mailto:lsniderman@coastal.ca.gov).

#### Wetlands Management Measure Tracking – Ross Clark, CCC

Three MMs for wetlands, riparian areas and vegetated treatment systems (6A, 6B and 6C and one MM from hydromodification (5.1B) were considered in this tracking effort.

These MM consist of:

- 6A. Protection of wetlands and riparian areas,
- 6B. Restoration of wetlands and riparian areas,
- 6C. Vegetated treatment systems, and
- 5.1B Instream and riparian habitat restoration.

The selection of Indicators was driven by available information used within current state and regional databases to track the implementation of MMs (i.e. restoration projects funded, number of reported projects and acres restored). Data was gathered from several databases and existing inventories (e.g. NRPI, CHRPD, WCB, SF Bay Wetland Tracker and State Parks Project database).

Results for the tracking effort are as follows.

- There was significant State funding for acquisition and restoration of wetlands (2500 projects totaling \$2.5 billion).

The MM's were categorize as restoration, acquisition, monitoring and assessment, and education and outreach

- While accurate estimates of acres restored was not possible, two databases reported over 13000 acres being "restored" to some degree.

Challenges and issues present to the TMC

- How to relate water quality value to success?
- There is not a method of extrapolation to water quality improvements.
- Habitat improvement (beneficial uses) was not reported in any standard way.
- Information on project location was good, but acreage estimates were unreliable.

For more information refer to the powerpoint presentation at <http://www.waterboards.ca.gov/nps/tmc.html>.

**Action Item:** To provide additional comments and suggestion on this work, please contact Ross Clark at [rclark@coastal.ca.gov](mailto:rclark@coastal.ca.gov).

#### Urban Management Measure Tracking – Lisa Sniderman and Greg Gearheart, SWRCB

. The NPS Program is considering tracking portions of three of 15 urban MMs using key indicators (see attachment). The goal is to choose indicators where there is good information available. Lisa presented the proposed indicators and rationale including: (1) | the number and distribution of Local Coastal Program Land Use plans, General Plans, watershed plans for a first cut at policy-level implementation; (2) number and location of impervious surface assessments conducted and percent change in cover, for tracking

more on-the-ground implementation; and looking at waterbodies that may be impaired for Onsite Wastewater Treatment Systems-related pollutants and plans, assessments developed in those waterbodies.

Greg informed the group of the State Water Board's Blue Ribbon Panel on Stormwater. The panel has been tasked to address the question of "are numeric effluent limits feasible." But they seem to also be interested in advising on larger issues, like how can the stormwater program be more performance oriented. State Water Board staff will use the results of the panel to develop a strategy (and maybe some statewide policy) to better direct our stormwater resources.

In addition, the State and Regional Water Boards are forming an impervious surface task force, which is looking at the feasibility of impervious surface as an indicator for protection of beneficial uses and water quality. Greg Gearheart said that the real "problem" is directly connected impervious surface, so using impervious surface, as an indicator may not relate accurately. Greg reported that Neil Weinstein at the Low Impact Development Center (in MD) says there is data that might suggest the use of "impervious surface" as an indicator actually might drive municipalities to create more urban sprawl and larger developments. Greg agreed to report back on this task force and other, related activities.

#### Suggestions:

- Model of hydrographs should be an indicator. We want to track where impervious surface would have been used but is not.
- The key is to drive developments to reduce impacts on hydrographs - better to use a good site design.
- NEMO effort is to get water restoration protection at the planning stage, which moves the regulatory approach to the front end.

Action Item: To provide additional comments and suggestion on this work, please contact Lisa Sniderman at [lsniderman@coastal.ca.gov](mailto:lsniderman@coastal.ca.gov)

#### Enhancing Regional Monitoring – Brianstorming – Sam Ziegler, USEPA

The Surface Water Ambient Monitoring Program (SWAMP) strategy relies on regional monitoring activities associated with each of the Regional Water Quality Control Boards (RWQCBs). Within some regions there are more robust regional monitoring efforts that compliment and enhance RWQCB activities (e.g., S.F. Bay Regional Monitoring Program, the Interagency Ecological Program, etc.). The CA NPS Program would aim to enhance regional monitoring efforts within the state framework for a few watersheds working on various scales (e.g., Central Valley, Klamath Basin and South Coast.) Activities may include identifying monitoring objectives and indicators, conducting assessments based on current data or facilitating data coordination and integration. All regional efforts would have to be compatible with the statewide SWAMP strategy.

#### Desired Outcomes

- Help addressing the NPS monitoring objectives
- Regional monitoring that compliments and enhances RWQCB/SWAMP activities
- Coordinated, integrated monitoring that is ongoing and sustainable
- Linkage between local, regional and statewide monitoring
- Enhanced California Water Quality Assessment Report (CWA Section 305(b))
- Accelerated NPS implementation
- Restoration of impaired waterbodies (TMDL implementation) and protection of high quality waters

Suggestions:

- Establish and identify reference conditions for assessment through the State Parks.
- Use groups to set up reference conditions/least disturbed watershed for each ecosystem – the group could be catalyst.
- Resources are needed to provide flow measurement equipment and training to the Coastal Watershed Council. This information can be used to investigate load impact on recreational waters.
- Develop a nested program within State and Regional Programs. Use flow measurements to develop linkage between the State and Regional Program.
- Maintain Flow Gauge Stations that USGS has drop of their monitoring efforts
- Technical Assistance in Bioassessment
- Develop Micro/Mesocosm systems using native species including biota in reference conditions and investigate how they respond to the system
- Look at reference conditions in water bodies that are now in urban areas
- Provide a venue to bring monitoring efforts together in the Central Valley
  - A directory/inventory of who is doing what and where in terms of monitoring efforts and who has the same/similar questions to address.
- Provide resources in Regions 1, 6, 5, and 7 to build more infrastructure, coordination and also assess information into adapted management (integration and interpretation efforts)
- Build expertise for grantees to make projects SWAMP comparable by providing more training available e.g. quality assurance, data input, and etc.

NPS Conference Workshops (11/8/05) Description – Rainer Hoenicke, SFEI

Two workshops (Monitoring Design and Performance Measurement) are to be held at the NPS Conference on November 11 in Sacramento. The primary audience will be grant recipients. The Monitoring Design Concepts workshop will be an introductory course focusing on issues that need to be considered in designing a monitoring project.

Performance Measurement workshop focuses on the overall performance assessment and evaluation by picturing how the weight of evidence links with environment and education or planned outcomes of a project.

## Round Robin Update

### **Watershed Indicators – Barbara Washburn, OEHHA**

A group was formed and tasked with two goals: (1) evaluate condition of State watersheds; and (2) measure the effectiveness of State programs. The group represents various State agencies and programs to identify core indicators and the framework to be used to identify those core indicators. The group is just in the beginning phase and the TMC could be a great source of information for the indicator group e.g., programmatic focus (NPS). OEHHA is focusing on watershed health. This effort is a good opportunity to identify data gaps to improve previous monitoring efforts as well as identify common attributes within watershed. This ties watershed health with success of program – for our purpose – identify what is being implemented, then judge the effectiveness of programs. The relevant aspect of the effort is coming up with indicators that show improvements in water quality not the success of programs.

### **SB 1070 – Angela Haren, CoastKeeper Alliance**

SB 1070 proposed to establish a monitoring council and it mandates State to coordinate monitoring efforts, identify data gaps and address, open and transparent government. The bill has wide support in the senate and no registered opposition.

### **SPARC (Scientific Planning and Review Council) – SWAMP, Val Connor**

Part of the SWAMP proposal was to convene an external scientific review panel (SPARC) to review the program. The second review by SPARC was just completed. The reviewers had to balance policy needs with the available resources for SWAMP. A draft report will be completed with a week, and the final report will be due at the end of March 2006. CalEPA and the State Board are requesting a presentation on the SPARC review. The Panel engaged in helping support monitoring, and suggested that monitoring needs to be a high priority of the State.

### **National Water Quality Monitoring Council (NWQMC) – Val Connor**

The NWQMC is planning their fourth annual conference in May 2006 in San Jose. The conference will be held jointly with USGS and other monitoring programs. The theme of this conference is transcending scale and linking monitoring to watershed programs. It was apparent to the Council, through working with the National Monitoring Network, that there is; (1) an absent of water quality data, (2) a need to pull together information on where monitoring is occurring and (3) fill in data gaps. It was identified that the State needs to focus on the watersheds and programs, and decide if the efforts are working and allow for adaptive management. SB 1070 could piece these efforts together to create a cohesive picture. A watershed indicator or program could be used to identify data needs and direct effective policy decisions.

### Wrap-up for TMC

In an effort to develop this group, we asked the TMC members give pros and cons on the design of these quarterly meeting in an effort to improve them.

Pros	Cons
Interactive dialogue is good	Sides are not readable

A lot of information in one place	Not many entities are represented
Identification of items to move up chain of command if necessary	Need to engage others
	Only one meeting location
	Teleconference not accessible
	Need to identify who needs to be at the table.

**Action Item:** To provide comments on the design of the TMC meetings and how to improve them, contact Sam Ziegler at [Ziegler.Sam@epamail.epa.gov](mailto:Ziegler.Sam@epamail.epa.gov) or Melene Emanuel at [memanuel@waterboards.ca.gov](mailto:memanuel@waterboards.ca.gov).

Ideas for the next meeting

- Update on SB 1070
- Follow-up on funding

**Action Item:** To provide topic suggestions for next meeting, contact Sam Ziegler at [Ziegler.Sam@epamail.epa.gov](mailto:Ziegler.Sam@epamail.epa.gov) or Melene Emanuel at [memanuel@waterboards.ca.gov](mailto:memanuel@waterboards.ca.gov).

**Note:** All TMC agendas, meeting minutes and materials, and presentations are posted on the SWRCB Website ( <http://www.waterboards.ca.gov/nps/tmc.html> ).

Attendee List for the October 25, 2005  
NPS Tracking and Monitoring Council Meeting

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